

ABSTRACT

Organophosphorus compounds comprising a polysulfide bridge

The invention relates to organophosphorus compounds comprising a polysulfide bridge, to their process of preparation and to their use as coupling agent between an inorganic or metal filler and an elastomer.

The compounds correspond to the formula (I) $(RO)_{2-t}R^1_tP(O)-O_x-(CH_2)_y-S_z-(CH_2)_y-O_x-P(O)(OR)_{2-t}R^1_t$ in which R represents a hydrogen, an alkyl, an aryl, a trialkysilyl, a trialkylamino or an alkali metal; R^1 represents an alkyl or an aryl; x is 0 or 1; y is an integer from 1 to 22, preferably from 2 to 4; $z \geq 3$; t is 0 or 1.